

# California Energy Commission Transmission Research Paving the Way for Renewables

October 25, 2010

8:00 AM –4:00 PM

Sacramento Public Tsakopoulos Library Galleria  
828 I St. Sacramento 95814

**8:00 AM**      **Registration**

**8:30 AM**      **California's Policy Goals:** (Commissioner Jeff Byron, Energy Commission)

*California is committed to 33% renewable generation by 2020.*

**8:45 AM**      **Research Innovations Enable More Renewables:** (Mike Gravely, Energy Commission)

*PIER's research in demand response, electric energy storage, and transmission are enabling renewable generation.*

**9:00 AM**      **Demystifying the Electric Grid:** (Alexandra Von Meier, Sonoma State)

*Learn the ABC's of the California electric grid: How does it operate and how can it accommodate renewable generation?*

**9:20 AM**      **Panel 1: A New Grid for California** (Merwin Brown, CIEE)

**Renewables and Storage - Together for California's Benefit:** Karin Corfee, KEMA

*Modeling provides insight into more effective and economical integration of storage and renewable generators.*

**Managing Energy Storage and Renewables for California:** Jeff Dagle, PNNL

*More renewables on the grid by using a variety of energy storage technologies.*

**Microgrids for Distributed Renewables - An Owners Perspective:** John Dilliot, UCSD

*The use of new software demonstrates customers' ability to utilize electric energy storage and renewables in a microgrid.*

**10:40 AM**      **Break**

**11:00 AM**      **Panel 2: Managing the California Grid with Renewables** (Jim Cole, CIEE)

**An Introduction to Synchrophasors:** Joe Eto, LBNL

*Synchrophasors; enabling the grid to operate with higher levels of renewables.*

**Synchrophasors in Action:** Jim Detmers, former VP for CAISO

*How synchrophasors monitor renewable generator performance.*

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## **Grid Oscillations, Limiting Your Power:** Jeff Dagle, PNNL

*Using synchrophasors to increase the amount of renewable power transmission lines can carry.*

## **Protecting the California Grid:** Lloyd Cibulka, CIEE

*Smarter protection systems to improve reliability of renewable generation.*

## **12:30 PM Lunch**

## **1:30 AM Panel 3: New tools to Manage Loads and Integrate Wind** (Larry Miller, CIEE)

## **Demand Response - Innovation for Renewable Support,** Mary Ann Piette, LBNL

*Advances in demand response technologies that facilitate renewable integration and allow customers to make decisions about their electricity use.*

## **Wind Generator Modeling:** Charlie Smith, Utility Wind Integration Group

*New generator models to accurately represent modern wind machines and expedite reliable and economic wind deployment.*

## **2:15 PM Smart Grid for Renewables and Much More** (David Geier, SDG&E)

*Renewable generators and electric vehicles are challenging the existing electric grid. SDG&E is investigating how a smarter grid can meet these challenges.*

## **2:45 PM Break**

## **3:00 PM Closing Comments:**

*Jeff Byron, California Energy Commission*

*David Geier, San Diego Gas & Electric Company*

*Kevin Dasso, Pacific Gas & Electric Company*

*Percy Haralson, Southern California Edison*

*Ken Edwards, Bonneville Power Administration*

*Jim McIntosh, California Independent System Operator*

*Charlie Smith, Utility Wind Integration Group*

*Phil Overholt, U.S. Department Of Energy*

## **4:00 PM Adjourn**